

# XTAL JR.

A BULLETIN OF THE VE OPERATORS' ASSOCIATION  
106 Jarvis St., Toronto

Number 2

April, 1940

## FILLING A NEED

Greetings, Gang! Here is XTAL JR., a bit later than we had intended, but welcome, we hope. The disappearance of our radio communication system, and the abandonment of regular activity reports, make the preparation of a bulletin like this a bit difficult, but the effort must be continued. It becomes more and more obvious that some such publication as this is absolutely essential, for there is no other way in which Canadian ham news can be circulated. We Canadian amateurs have long depended for much of the news of our operations on the "Activities Section" of QST. For various reasons this most valuable of all amateur radio publications no longer carries news from our side of the boundary. QST and similar publications will still serve to keep us up-to-date in the technical fields, but we are now on our own in providing news of Canadian activities. For there ARE activities, and XTAL JR. will try to gather news of them and disseminate it. Particularly important is it that some link be provided between the amateurs on active service and the rest of Cansdien hamdom. In line with this, the Executive of the VE Operators' Association have voted that all Canadian radio amateurs with His Majesty's Forces shall have, until further notice, full rights of membership in the Association, including the reception of XTAL JR., as issued.

To serve these purposes the publishers of XTAL JR. need information. First, news is needed. Hams all over Canada can cooperate by writing headquarters and supplying information on what is being done by the radio amateurs of their vicinity. Second, if XTAL JR. is to be supplied to the amateurs with the Forces, the names, ranks, regimental numbers, and units of those entitled to receive it must be available. The help of all amateurs, both within and out of the Forces, is requested for this purpose.

Although the annual dues in war-time have been reduced to 25 cents, a number of members have sent in renewals of \$1.00, the balance to be used as needed. The Executive greatly appreciate such action, as it will assist in the mailing of XTAL JR. to the Forces.

## CLUB ACTIVITIES

The Key Klick Klub of Toronto held its annual banquet on April 8 at the New Statler Hotel. About 140 persons attended, including 8 from the Hamilton Radio Club, VE2NL from Rivière du Loup, and many other out-of-town hams. Ken Soble made a recording of his Silver Dollar program during the banquet. It was played back as soon as made, and on April 9 was broadcast over CFRB. The toast to the King was given by Syd Prior, and to Ham Radio by Tom Powell.

Ernie Swan, engineer at CKCL, related some of the trials and tribulations encountered in building the new CKCL 1,000-watt transmitter, which will be located to the east of Toronto. It will use two vertical antennae five-eighths of a wave-length apart, giving an east-west pattern. Some of the unusual features of the station plans were described, and photographs displayed.

During the evening a collection was taken for the purpose of purchasing cigarettes to be sent to England with the compliments of those present, and distributed at one of the Empire hamfests being held at military base camps. The sum of \$7.00 was obtained, which will serve to purchase 2,100 cigarettes.

A C.M.R. colour movie, "A Trip through the Rockies", was shown, followed by the prize draw. The hamfest continued until "closing time".

The Wireless Association of Ontario had a most successful meeting on April 12, in the Electrical Building, University of Toronto. The policy of the W.A.O.O. is to keep alive interest in the technical phases of radio and related subjects. In pursuance of this, the speaker of the evening was Mr. R.B. Steele, Chief Engineer, Canadian National Telegraphs, whose subject was "Telegrams by Wired Wireless". In a delightful manner Mr. Steele explained the systems of multiple telegraphy, the so-called carrier current method, some of

which operate at radio frequencies, others within the audio range. A large series of lantern-slide photographs and diagrams made the explanations clear. The high point of the address was the actual demonstration of an audio carrier system, and the audience was permitted to hear on a speaker, and see on an oscilloscope, the form of the transmission at the various stages along the route.

Another feature of the program was the presentation by Alf Edmunds, as an entry in the Radio College Competition, of a tube tester and analyser of unique design. Among other special features, this has provision for the testing of any element of a tube in any possible function, thus allowing for the almost infinite variation that characterizes the modern series of radio tubes.

The Northern Alberta Radio Club, of Edmonton, is sponsoring and circulating a petition to the Dominion authorities, urging the licensing of Canadian amateurs for operation on the ultra-high frequency bands. Although reasons for opposing such a move were outlined in a previous issue of XTAL JR., the N.A.R.C. are offering some good arguments in favour, and the VE Ops wish them luck, for the matter is at least worthy of the full consideration of the authorities.

#### ANNOUNCEMENTS

The Hamilton Amateur Radio Club will hold its Annual Dinner and Hamfest on Monday, May 6, at 6.30 P.M., in the Men's Dining Room at McMaster University. Ernie Roy, W9HIV, of Buffalo, N.Y., will address the meeting on ultra-high frequency activities, and is expected to give an account of the latest work on the bands above 60 megacycles.

The Toronto Amateur Radio Association, whose Annual Picnics have been a feature of summer activities for a number of years, has announced that the Picnic this year will be held on Saturday, July 13, at Area 2, Hanlan's Point. Admission will be 15 cents, two for 25 cents, children 5 cents. If you can come, put this event on your summer calendar.

*Remember the name . . .*  
**GENERAL ELECTRIC**  
*for all your electrical requirements*

---

○ RADIOTRONS	○ RADIO
○ REFRIGERATORS	○ RANGES
○ WASHERS	○ IRONERS
○ VACUUM CLEANERS	○ SMALL APPLIANCES

---

Many years of research and Manufacturing experience are your assurance of outstanding quality and long dependable service.

**CANADIAN GENERAL ELECTRIC Co. Limited**

3

The Toronto Chapter of the VE Operators' Association will hold a meeting in the Metropole Hotel, Toronto, on Tuesday, May 14, from 7 to 8 P.M. This is an Annual Meeting, and business will include election of officers. After adjournment, the gang will proceed to the Casino. Admission will be 50 cents, and all hams are invited.

#### THE ROYAL CANADIAN CORPS OF SIGNALS

Amateur radio operators are interested these days in the branches of the Armed Forces in which radio and other forms of signalling are employed. For this reason XTAL JR. here offers a brief account of the organization and function of the Royal Canadian Corps of Signals. It is hoped in future issues to discuss the communications work of the Royal Canadian Air Force and the Royal Canadian Navy. Naturally these discussions will have to be limited to matters of "common knowledge", or we might have the censors cracking down, hi!

The Royal Canadian Corps of Signals is a distinct branch of the Canadian army, just as is the infantry or the Royal Canadian Artillery. The "Signals", as the Corps is familiarly known, is classed with the fighting troops, as distinct from such non-fighting services as the Royal Canadian Army Medical Corps. The R.C.C.S. is responsible for all communication in the army above that carried on within infantry battalions and artillery batteries. For this purpose the Corps employs all possible means of communication, not only radio, line, lamp, heliograph, and flag, but also numbers of motor cycle dispatch riders. The higher units of the Signals are very flexible, and may be organized to fit the task at hand, but the comonest unit, known as Divisional Signals, has a fixed organization, with a definite number of men, and specified equipment. "Div. Sigs." serves a Division, which is a force of about 15,000 men, including all arms and services. To supply the communications for a Division, Div. Sigs. is organized into three companies, of which No.1 supplies the needs of Divisional Headquarters, No.2, the artillery, and No.3, the infantry brigades. Most of the radio, or wireless, as they call it in the army, is operated by "A" section of No.1 company, but radio is also used with the artillery and infantry.

The men of the R.C.C.S. are known as Signalmen, just as infantrymen are Privates, and artillermen are Gunners. Most of the signalmen are specially qualified in some "trade", such as that of operator, lineman, or electrician. Non-commissioned officers have very responsible tasks, and have to "know their stuff". The work of the officers is mainly directive, and they do very little of the actual signalling. Unlike an infantry lieutenant, who leads his men into battle, a signal lieutenant directs operations of his command, and thus works, on a small scale, more like a colonel or a general. Graduates in electrical engineering are preferred for Signals commissions, but other qualifications are considered.



Badge of the Royal Canadian Corps of Signals.  
"Swift, Dexterous, Vigilant."

#### HAMS WITH THE CANADIAN ARMED FORCES

In the last issue of XTAL JR. we published a list of calls of hams known to be with the Navy, Army, or Air Force. Since then, many more have been added to the list, and it is now possible to give, in most cases, the name, rank, and branch of the Service, as well as the call. To bring these Canadian data in line with those being published by the Radio Society of Great Britain, we here offer the complete list so far compiled by the VE Operators' Association, under the direction of VE3SG. Thanks are tendered to all those who have cooperated in supplying names and other data, and it is hoped that they and others will continue to assist in the compilation of this very important record. Information, including name, rank, regimental number, unit, and call, may be sent to the Association headquarters, or direct to F.H.B. Saxon, 302 Lee Avenue, Toronto, Ontario. Corrections will also be greatly appreciated.

Rank and Name	Regiment or Branch	Pre-war call
Sigmn. Acton, G. W.	R.C.C.S.	VE5SP
Tel. Alexander, H.	R.C.N.	5AIY
A.C.2 Alexander, J. A.	R.C.A.F.	3AYP
Tel. Anderson, B.	R.C.N.	4AMK
Sigmn. Anderson, E.G.F.	R.C.C.S.	20Z
A.C.2 Antoine, E.	R.C.A.F.	4AGM
A.C.2 Arnold, A.	R.C.A.F.	4AKL
A.C.2 Arnold, B. W.	R.C.A.F.	3AXJ
Tel. Atwood, H. G.	R.C.N.	3AEG
Tel. Bate, L.	R.C.N.	3AGN

## HAMS WITH THE CANADIAN ARMED FORCES (continued)

Rank and Name	Branch or Regiment	Pre-war call
A.C.2 Bavington, E. J.	R.C.A.F.	VE3ANI
A.C.2 Bennett, H. L.	R.C.A.F.	4SD
A.C.2 Bertrand, C. A.	R.C.A.F.	2PG
Tel. Best, B.	R.C.N.	3ZQ
Tel. Betts, J.A.	R.C.N.	5EB
A.C.2 Bissett, F.	R.C.A.F.	3AIU
Tel. Bolduc, H.	R.C.N.	3AYC
A.C.2 Boughner, C.	R.C.A.F.	3IM
A.C.2 Breau, Ed.	R.C.A.F.	1DS
Sigmn. Brodribb, P.	R.C.C.S.	3AON
Sigmn. Brough, F. S.	R.C.C.S.	2CF
A.C.2 Buller, Ted.	R.C.A.F.	3CO
A.C.2 Burgin, F.	R.C.A.F.	3AUI
A.C.2 Burke, D. W.	R.C.A.F.	4YJ
Sigmn. Burrows, Cam.	R.C.C.S.	3AGC
Tel. Christie, C.	R.C.N.	3AZV
Tel. Clark, G.	R.C.N.	5AAZ
Sigmn. Craft, F.G.C.	R.C.C.S.	1DG
A.C.2 Cromwell, K. O.	R.C.A.F.	3KD
Tel. Crooker, R. L.	R.C.N.	3MC
A.C.2 Davis, G. W.	R.C.A.F.	4UO
Tel. Diamond, M.	R.C.N.	3ABU
Tel. Dixon, L. G.	R.C.N.	4AGN
Tel. Doughty, N.	R.C.N.	4AGQ
A.C.2 Draper, R. E.	R.C.A.F.	5KO
Major Driver, Art.	R.C.C.S.	4CM
Tel. Drysdale, W. H.	R.C.N.	5NO
Sigmn. Dudley, F.	R.C.C.S.	3ATF
A.C.2 Duffy, Ray	R.C.A.F.	1ND
A.C.2 Duncan, D. M.	R.C.A.F.	4JC
Sigmn. Dunn, R.	R.C.C.S.	3ATK
A.C.2 Earle, A. J.	R.C.A.F.	4RT
Tel. Edwards, B.	R.C.N.	3FD
Sigmn. Eon, L. G.	R.C.C.S.	2LE
A.C.2 Erb, R.	R.C.A.F.	3VY
A.C.2 Farr, N. F.	R.C.A.F.	3ANQ
A.C.2 Fulton, G. W.	R.C.A.F.	10X
Tel. Geary, H. L.	R.C.N.	4ABE
Cpl. Gladstone, R. N.	R.C.C.S.	3ATG
A.C.2 Gordon, J.	R.C.A.F.	3AVN
Tel. Graaves, J. H.	R.C.N.	5AGJ
Sigmn. Green, Norm.	R.C.C.S.	3IV
A.C.2 Guerette, L.	R.C.A.F.	2RG
A.C.2 Hamilton, Jack	R.C.A.F.	3KV
Cpl. Harris, C. L.	R.C.C.S.	3AQI
Pte. Harris, Jas.	South. Sask. Regt.	4UZ
Sigmn. Hawkins, W. H.	R.C.C.S.	5NR
A.C.2 Hawkins, J. E.	R.C.A.F.	4AJ
Sigmn. Haughin, F. E.	R.C.C.S.	1DP
Sigmn. Haymond, W. G.	R.C.C.S.	5AFH
Sigmn. Henderson, Tom	R.C.C.S.	3AII
Lieut. Heustis, R. D.	R.C.C.S.	2BU
Sigmn. Holloway, J. H.	R.C.C.S.	3AMY
Tel. Holmes, L. W.	R.C.N.	3HV
P/Lieut. Irwin, N.	R.C.A.F.	3LN
Tel. Jinks, J. A.	R.C.N.	4ZC
A.C.2 Johns, W.	R.C.A.F.	5SD
Sigmn. Johns, W. D.	R.C.C.S.	3AFW
Sigmn. Johnson, F.	R.C.C.S.	3CM
A.C.2 Jones, Stan.	R.C.A.F.	5ADD
A.C.2 Jones, T.T.H.	R.C.A.F.	4ABD
A.C.2 Keen, J.	R.C.A.F.	3ADU
Sigmn. Kelcey, E. K.	R.C.C.S.	5EK
A.C.2 Keys, F.	R.C.A.F.	4VG
A.C.2 Knight, J.	R.C.A.F.	3YX
A.C.2 Knightly, R. E.	R.C.A.F.	3ES

HAMS WITH THE CANADIAN ARMED FORCES (continued)

Rank and Name	Branch or Regiment	Pre-war call	Rank and Name	Branch or Regiment	Pre-war call
Sgtmn. Knowlton, K.	R.C.C.S.	VE3ACQ	Sgtmn. Nayall, B.R.	R.C.C.S.	VE5PM
Sgtmn. Kufluck, A.	R.C.C.S.	338	A.C.2 Neff, L.O.B.	R.C.A.F.	4APD
A.C.2 Lawrence, A.I.	R.C.A.F.	4CX	Sgtmn. Newnham, E.	R.C.C.S.	SABO
A.C.2 Lawrie, S.W.	R.C.A.F.	4IN	A.C.2 Newton, H.B.	R.C.A.F.	5HI
A.C.2 Leutchford, L.W.	R.C.A.F.	SAAD	A.C.2 Page, Tony	R.C.A.F.	3BPV
A.C.2 Lorch, Bob	R.C.A.F.	5AKD	Tel. Penny, E.V.	R.C.N.	5AIZ
A.C.2 McAleese, A.J.	R.C.A.F.	5AVM	Tel. Poulton, P.	R.C.N.	5AGN
A.C.2 McArthur, I.F.	R.C.A.F.	4LD	A.C.2 Reid, J.L.	R.C.A.F.	40Z
Sgtmn. McArthur, L.R.	R.C.C.S.	2EM	A.C.2 Reidford, N.G.	R.C.A.F.	4ANH
Sgtmn. McCallum, B.C.	R.C.C.S.	5AF	Sgtmn. Richardson, J.	R.C.C.S.	ex3ALH
A.C.2 McCallum, F.B.	R.C.A.F.	4AIW	A.C.2 Riddell, Al.	R.C.A.F.	5DU
Tel. McCrindle, R.R.	R.C.N.	4AEU	Capt. Roach, G.L.	R.C.C.S.	2BT
A.C.2 McGregor, G.A.	R.C.A.F.	3VT	Sgtmn. Robbins, V.L.	R.C.C.S.	5AHV
Tel. McKnight, D.L.	R.C.N.	3K6	A.C.2 Robertson, A.J.	R.C.A.F.	1EM
Sgtmn. McPherson, A.M.	R.C.C.S.	3ACK	A.C.2 Romanchuk, J.	R.C.A.F.	4ABC
A.C.2 MacDonald, P.	R.C.A.F.	4LV	Sq/Ldr. Russell, A.H.K.	R.C.A.F.	9AL
Sgtmn. MacKey, J.S.	R.C.C.S.	5AFN	A.C.2 Sangster, Bob	R.C.A.F.	3FB
A.C.2 Marnie, Wilfred	R.C.A.F.	3AD	A.C.2 Sans, E.C.	R.C.A.F.	3AR3
Tel. Marquis, N.	R.C.N.	3ACT	Sgtmn. Savage, H.E.	R.C.C.S.	5TH
A.C.2 Matthews, R.E.	R.C.A.F.	3AKB	Tel. Schles, David	R.C.N.	5LY
A.C.2 Mnuchal, S.B.	R.C.A.F.	4JD	A.C.2 Simpson, H.J.	R.C.A.F.	4AHF
A.C.2 McEwan, D.W.	R.C.A.F.	3RV	A.C.2 Sleath, G.	R.C.A.F.	3ALR
Tel. Molnyk, N.	R.C.N.	4ASY	A.C.2 Southall, A.A.	R.C.A.F.	5UR
A.C.2 Mondham, D.	R.C.A.F.	3AKA	Tel. Stark, H.G.	R.C.N.	3UR
A.C.2 Michael, Bill	R.C.A.F.	3AD	Sgtmn. Steiner, W.J.	R.C.C.S.	3LP
Sgtmn. Miller, R.	R.C.C.S.	2ML	A.C.2 Stevenson, G.	R.C.A.F.	3RI
Tel. Miller, B.C.	R.C.N.	4AHU	A.C.2 Stiles, Gao.	R.C.A.F.	3TA
Tel. Miser, C.L.	R.C.N.	3AYF	Tel. Nuggett, G.	R.C.N.	3AL
A.C.2 Morgan, H.	R.C.A.F.	3ACB	Tel. Connell, H.W.S.	R.C.N.	3ASD
Capt. Morgan, H.C.	R.C.C.S.	3HJ	A.C.2 Papp, V.H.	R.C.A.F.	3APF
A.C.2 Musselman, J.	R.C.A.F.	4AHM	Sgtmn. Tuttereall, H.	R.C.C.S.	3TP

(Continued on page 8)

# HAMMOND

ANNOUNCES

## A COMPLETE INDUCTANCE AND TRANSFORMER SERVICE

See page 8  
for latest  
catalogue

Special Inductors in values from 100uh to 1,000 henrys supplied on short notice. Inductance and Q checked on latest General Radio Equipment ~

Special Transformers for all types of work quickly supplied ~

Three Phase Transformers and line regulating types ~ Audio and Matching Transformers employing latest high permeability core materials ~

Divider Networks for high fidelity speaker systems ~

MADE IN CANADA BY

**HAMMOND MANUFACTURING COMPANY**  
GUELPH ONTARIO  
A 100% CANADIAN COMPANY

## HAMS WITH THE CANADIAN ARMED FORCES (continued)

<u>Rank and Name</u>	<u>Branch or Regiment</u>	<u>Pre-war call</u>	<u>Rank and Name</u>	<u>Branch or Regiment</u>	<u>Pre-war call</u>
A.C.2 Taylor, Bruce	R.C.A.F.	VE30Z	A.C.2 Webster, Gordon	R.C.A.F.	VE2BB
A.C.2 Thoms, J.H.	R.C.A.F.	3ARU	Tel. Whitton, N.	R.C.N.	3AUD
A.C.2 Townsend, W.	R.C.A.F.	3ALP	A.C.2 Widdop, J.H.	R.C.A.F.	4AGN
A.C.2 Toy, F.H.	R.C.A.F.	5HE	Tel. Wigle, C.E.	R.C.N.	3WL
Tel. Underwood, C.F.	R.C.N.	4AFG	A.C.2 Wilde, C.E.	R.C.A.F.	4ALW
A.C.2 Usselman, J.T.	R.C.A.F.	4JK	A.C.2 Wilkes, J.W.	R.C.A.F.	3HR
A.C.2 Veale, W.N.	R.C.A.F.	40Q	A.C.2 Williams, J.A.E.	R.C.A.F.	4ALE
Sgt. Vanning, Al.	R.C.C.S.	3ST	A.C.2 Williams, R.	R.C.A.F.	4ASE
A.C.2 Vincent, F.E.	R.C.A.F.	4KV	Sigmn. Williams, V.J.	R.C.C.S.	3KE
A.C.2 Voege, T.F.G.	R.C.A.F.	3AEK	Sigmn. Willing, W.R.	R.C.C.S.	3ANL
Sigmn. Wade, D.	R.C.C.S.	2AM	Sigmn. Wilson, Al.	R.C.C.S.	3AMB
A.C.2 Wadsworth, E.F.	R.C.A.F.	5AAD	A.C.2 Wittman, J.W.	R.C.A.F.	400
Sigmn. Wadsworth, W.D.	R.C.C.S.	5ZM	Tel. Whyte, R.R.	R.C.N.	4RP
Tel. Wale, D.A.	R.C.N.	3WZ	A.C.2 Wood, Frank	R.C.A.F.	3AGH
A.C.2 Walmsley, J.	R.C.A.F.	4AEM	A.C.2 Young, J.	R.C.A.F.	5PV
Sigmn. Walton, J.H.	R.C.C.S.	2KY	A.C.2 Young, V.H.	R.C.A.F.	3ALK
Tel. Watson, R.	R.C.N.	5DS	Tel. Young, W.	R.C.N.	4ASD

## WITH THE C.A.S.F.

The following report of a hamfest in England is taken from the March issue of the T. & R. Bulletin.

"Although the Aldershot and Farnborough ham gathering on Sunday, Feb. 25, was primarily arranged to provide an opportunity for a rag-chew between VE and G service hams stationed in the neighborhood, many civilians seemed desirous of meeting their friends from across the Atlantic. The company, numbering nearly sixty, was welcomed by the organizers, Bill Wadsworth, VE5ZM and Jim Kirk, G6ZO. Mr. A. D. Gay, G6NF (vice-president [R.S.G.B.]), replying on behalf of those present, expressed the pleasure R.S.G.B. members felt in being able to make personal contacts with their Canadian colleagues.

"Apart from the stalwart contingent from Canada which included VE3AAT, 3AGC, 3AMB, 3AMY, 3APG, 3ATK, 3AYO, 3KE and 5ZM - Northern Ireland, Scotland, Wales, and Bahrain Island were represented, the latter by 4U7ER."

Judging by the pictures accompanying the article, the boys are doing all right!

To VE's in England. - Mr. H. W. Willis, G6OU, 67A Southern Road, Basingstoke, and Miss C. Hall, G8LY, North Waltham Rectory, Winchester, will be pleased to welcome any Canadian amateurs who may find themselves in their locality - T. & R. Bulletin.